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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,092	04/23/2004	Kazuhiko Hara	Q80832	8699

7590 08/13/2004  
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EXAMINER

DO, AN H

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/830,092

Applicant(s)

HARA ET AL.

Examiner

An H. Do

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 10/147,313.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>23 April 2004</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/147,313, filed on 17 May 2002.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 23 April 2004 was filed and is being considered by the examiner.

### ***Specification***

3. The abstract of the disclosure is objected to because the word "(FIG. 5)" in the last line should be deleted. Correction is required. See MPEP § 608.01(b).
4. The disclosure is objected to because of the following informalities:
  - Insert --, now U.S. Patent No. 6,742,878-- after "May 17, 2002" in line 1.Appropriate correction is required.

### ***Claim Objections***

5. Claims 7 and 9 are objected to because of the following informalities:

#### **In claim 7:**

-Insert --and-- after "ink supply port;" in line 6.

#### **In claim 9:**

-Claim 9 depending on claim 2 is improper since the applicant has already canceled claim 2. Therefore, examiner presumes claim 9 depends on claim 8 for the purpose of examination.

Appropriate correction is required.

***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 8 and 9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 6,742,878 in view of Moriyama et al (US 6,050,680).

Claims 1 and 2 of U.S. Patent No. 6,742,878 disclose the features as claimed in the instant application as shown in the following Claim Comparison Table:

<u>U.S. Application No. 10/830,092 CLAIMS</u>	<u>U.S. Patent No. 6,742,878 CLAIMS</u>
<p>8. An ink cartridge for a recording apparatus, comprising:</p> <ul style="list-style-type: none"><li>an ink supply port;</li><li>a chamber containing pigment ink therein; and</li><li>a flow passage for communicating the chamber with the ink supply port,</li></ul> <p>wherein the flow passage has such a flow passage for causing the ink in a lower area in the chamber and the ink in an upper area in the same chamber to flow and merge with each other.</p> <p>9. The ink cartridge according to claim 8, further comprising:</p> <ul style="list-style-type: none"><li>a wall partitioning the chamber from the flow passage, wherein the flow passage includes first and second communication ports formed through the partition wall, and are respectively located at upper and lower positions in a gravity direction when the ink cartridge is mounted to the recording apparatus.</li></ul>	<p>1. An ink cartridge for a recording apparatus, comprising a container having a plurality of ink compartments adjacent to each other and an ink flow passage for communicating the ink compartments with one another, wherein: the ink flow passage has such an ink flow passage as to cause ink in a lower area in one of the ink compartments and ink in an upper area in the one of the ink compartments to flow and merge with each other.</p> <p>2. The ink cartridge as claimed in claim 1, further comprising: an ink supply port; a filter located in an upstream side with respect to the ink supply port in an ink flow direction; and a partition wall partitioning the adjacent ink compartments one from the other, and being located in an upstream side with respect to the filter in the ink flow direction; wherein the ink flow passage includes first and second communication ports formed through the partition wall, and respectively located at upper and lower positions in a gravity direction when the ink cartridge is mounted to the recording apparatus.</p>

Claims 1 and 2 of U.S. Patent No. 6,742,878 do not disclose a chamber containing pigment ink therein.

Moriyama et al teach a chamber (Figure 1, tanks 6Y, 6M, 6C, 6Bk) containing therein pigment inks (column 3, lines 14-17), for the purpose of recording images with a plurality of inks with different densities for each color (column 1, lines 9-11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to, as taught by Moriyama et al into Claims 1 and 2 of U.S. Patent No. 6,742,878, for the purpose of recording images with a plurality of inks with different densities for each color (column 1, lines 9-11).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2853

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over lida (US 6,193,364) in view of Moriyama et al (US 6,050,680).

lida discloses in Figures 1 and 2A-2C the following claimed features:

Regarding claim 7, an ink cartridge (1) for a recording apparatus, comprising:

- an ink supply port (2);
- a chamber (4) containing ink therein, the chamber (4) being at least in part defined by a film member (flexible membrane 33);
- a flow passage (ink supply chamber 5), through which the ink contained in the chamber (4) can flow into the ink supply port (2); and
- a wall (combination of elements 3, 9, 11) partitioning the chamber (4) from the flow passage (5), the wall (combination of elements 3, 9, 11) having a first through hole (12) and a second through hole (6) which are respectively located at upper and lower positions in a gravity direction when the ink cartridge (1) is mounted to the recording apparatus (Figure 1), each of the first and second through holes (12, 6) serving as an inlet for the ink from the chamber to the flow passage (ink supply chamber 5).

Regarding claim 8, an ink cartridge (1) for a recording apparatus, comprising:

- an ink supply port (2);
- a chamber (4) containing ink therein; and
- a flow passage (ink supply chamber 5) for communicating the chamber (4) with the ink supply port (2),

wherein the flow passage (ink supply chamber 5) has such a flow passage (passage 15) for causing the ink in a lower area (bottom portion of ink chamber 4) in the chamber (4) and the ink in an upper area (top portion of ink chamber 4) in the same chamber (4) to flow and merge with each other (when the valve 8 opens).

Regarding claim 9, a wall (combination of elements 3, 9, 11) partitioning the chamber (4) from the flow passage (5), wherein the flow passage includes first and second communication ports (12, 6) formed through the partition wall (combination of elements 3, 9, 11), and are respectively located at upper and lower positions in a gravity direction when the ink cartridge (1) is mounted to the recording apparatus (Figure 1).

lida does not disclose the following:

Further regarding claims 7 and 8, a chamber containing therein pigment ink.

Moriyama et al teach the following:

Further regarding claims 7 and 8, a chamber (Figure 1, tanks 6Y, 6M, 6C, 6Bk) containing therein pigment inks (column 3, lines 14-17), for the purpose of recording images with a plurality of inks with different densities for each color (column 1, lines 9-11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to, as taught by Moriyama et al into lida, for the purpose of recording images with a plurality of inks with different densities for each color (column 1, lines 9-11).

**Contact Information**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to An H. Do whose telephone number is 571-272-2143. The examiner can normally be reached on Monday-Friday (Flexible).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



AD  
August 6, 2004

K. J. I —  
Per. Maey 8/04